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ABSTRACT OF THE DISCLOSURE

A fluorescent lighting system has: (A) a central power supply connected with regular power line voltage and including a number of power supply modules (e.g., eight), each such module having: (i) a parallel-resonant self-oscillating bridge inverter operative to provide a 35 kHz sinusoidal output voltage at a pair of primary output terminals; (ii) a tank-inductor and a tank-capacitor parallel-connected across the primary output terminals; and (iii) several (e.g., four) pairs of secondary output terminals, each connected with the primary output terminals via its own dedicated current-limiting sub-circuit; thereby to prevent a load connected with a pair of secondary output terminals from drawing more than a certain amount of power; thereby, in turn, to render each pair of secondary output terminals fire-hazard-safe; (B) a plurality of lighting fixtures (e.g., 32), each having a fluorescent lamp and a power input receptacle; each lighting fixture also including a power-factor-corrected 35 Khz ballast connected between its power input receptacle and its fluorescent lamp; and (C) a light-weight power cord plug-in-connected between the power input receptacle of each lighting fixture and one of the pairs of power output terminals. Thus, a single central multi-port power supply will serve to power a large number (e.g., 32) lighting fixtures, with each individual lighting fixture connected directly with one of the many (e.g., 32) individual pairs of secondary power output terminals of the central power supply.